

Chicago Flexible Shaft Company

5529 W. Roosevelt Road, Chicago, Illinois

235 Broadway, New York, N. Y.
 211 So. Foster Avenue, Lansing, Mich.
 Pioneer Bldg., St. Paul, Minn.
 2316 Locust St., St. Louis, Mo.
 703 Magee Building, Pittsburgh, Pa.
 604 Chamber Commerce Bldg., Pittsburgh, Penn.

943 Granite Bldg., Rochester, N. Y.
 215 Pioneer Trust Bldg., Kansas City, Mo.
 2806 Santa Fe Avenue, Los Angeles, Calif.
 332 Sycamore St., Cincinnati, Ohio
 1738 Nineteenth St., Milwaukee, Wisconsin
 4805 Park Avenue, Indianapolis, Indiana

Room 210, Wesley Bldg., Philadelphia, Pa.
 1501 Heyburn Bldg., Louisville, Ky.
 79 Milk St., Room 1000, Boston, Mass.
 135 Bluxome St., San Francisco, Calif.
 317 Preston Ave., Houston, Texas.
 911 Martin Bldg., Birmingham, Ala.

Manufacturers of Industrial Furnaces

STEWART

Though space permits the illustration of only a few Stewart Furnaces that are particularly suitable for educational work, there are furnaces in the Stewart line for every heat treating requirement. For thirty years Stewart Engineers have been building up this line and today you will find a Stewart in almost every industrial plant of any size.

That is the chief reason why Stewarts are the best furnaces for educational use: The student learns heating operations with furnaces of the latest design—furnaces that he will be called upon to use when he leaves school and goes into the industrial plant.

Stewart Tool Hardening and Heat Treating Furnaces



Has U-shaped floor slab. Combustion takes place under the floor and the heat penetrates to every portion of the furnace. Flame does not strike the work, thus clean work is assured. Furnace under positive control and easy to regulate—essentials to getting uniform results.

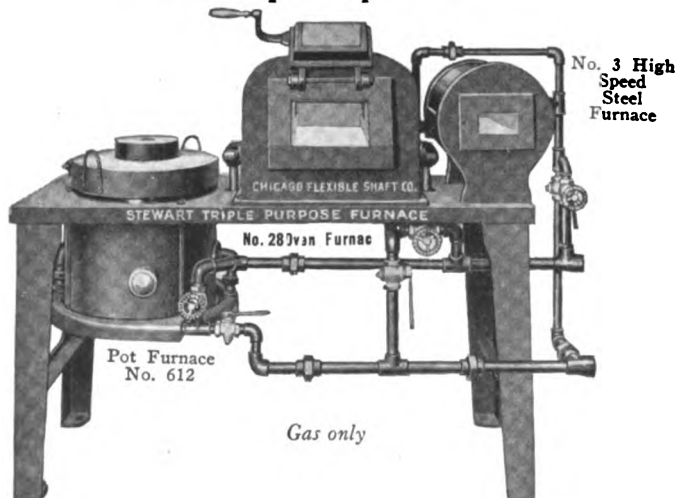
Made in the following sizes:

- No. 1—5"x 9"x 13 1/4"
- No. 2—8"x 14"x 18"
- No. 3—9"x 15"x 24"
- No. 14—6"x 10"x 15"
- No. 16—8"x 14"x 22"
- No. 26—6"x 12"x 22"
- No. 27—6"x 12"x 18"
- *No. 28—4"x 8"x 12"

No. 28 equipped with hinged door. If balanced door is wanted as shown it will be supplied without extra charge if specified at time of ordering.

Gas or Fuel Oil

Stewart Triple-Purpose Furnace



No. 3 High Speed Steel Furnace

Pot Furnace No. 612

Gas only

An assembly of three of our standard furnaces, gives the operator a complete heat treating plant. The units may be operated singly or all at one time. The left section is a No. 612 Pot Furnace, for lead or cyanide hardening or for oil tempering; it can also be used as a liquid heating medium. The center section is a No. 28 Oven for hardening and general heat treating, and can be used for high speed steel if fitted with carbofrax slab. This can be taken care of at a small additional cost. The right section is a No. 3 High Speed Steel Furnace for hardening high speed steel, and it can also be used for forging work. In addition to the above we make this in combinations of any two of the above furnaces.

- A. Combination No. 28 Oven and No. 3 High Speed Steel Furnace.
- B. Combination No. 28 Oven and No. 612 Pot Furnace.
- C. Combination No. 3 High Speed Steel Furnace and No. 612 Pot Furnace. Can also be made up in any two or three of the small furnaces shown in this catalog.

Stewart Industrial Furnaces range from the small gas-fired soldering iron heater to the great big car type annealing and porcelain enamelling furnaces. They are designed to use any kind of fuel—oil, gas, or combination oil and gas, as the requirements may demand.

So regardless of what your problem may be, Stewart Industrial Furnaces are supplied to meet any and every requirement of the industrial furnace field. You simply outline your needs and our engineers then supply the proper furnace for the job from our standard sizes if possible, or design special equipment to take care of your needs properly.

Stewart Metal Melting Furnaces



These furnaces, primarily intended for brass melting, are used by many for the melting of aluminum, nickel-silver and other non-ferrous metals with highly satisfactory results.

They are designed to use Standard Dixon Graphite Crucibles of corresponding numbers; that is, No. 12A Furnace uses No. 12 Crucible or smaller; No. 80A uses No. 80 Crucible or smaller, and so on.

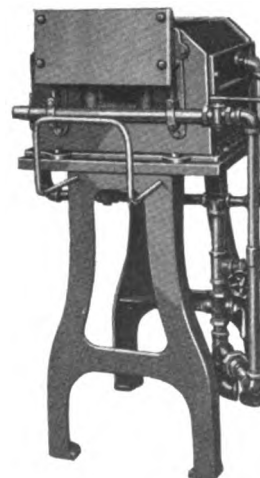
The linings are of very high grade refractory material, heavy enough to resist the abrasive action of the swirling flame which the burners set up, and the slagging action of the metals. The swinging top, made of one piece of molded refractory, banded to add strength, lifts easily from the body of the furnace by means of a special mechanism, and swings to one side, giving a clear opening into the body of the furnace—a feature much appreciated at casting time.

Gas or Oil Fuel

| Furnace No. | Capacity | Size Dixon Crucible | Floor Space |
|-------------|----------------|---------------------|-------------|
| 12A | 36 lbs. brass | No. 12 | 24"x 24" |
| 35A | 105 lbs. brass | No. 35 | 28"x 28" |
| 60A | 180 lbs. brass | No. 60 | 30"x 30" |
| 80A | 240 lbs. brass | No. 80 | 32"x 32" |

In ordering, specify whether for gas or oil burners.

The Stewart School Forge



For Gas Only

This forge is built specially for class work and is much cleaner and easier to operate than the old coal burning type of forge. With this furnace the student can learn to handle the welding operations quickly—and to turn out a neat, clean job.

There is a shield and blow-pipe over the opening of this forge to keep heat away from the operator, (heat is blown upward through slot by blow-pipe). It is a safe furnace. Any boy can operate it.

Cast iron base. Steel shell. Lined with first quality refractories that will stand up for years of hard service.

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